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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,493	12/05/2003	Jun Watanabe	Q78867	7236

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EXAMINER

KRAMER, NICOLE R

ART UNIT PAPER NUMBER

3762

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/727,493	Applicant(s) WATANABE ET AL.	
	Examiner Nicole R. Kramer	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/03/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the non-descript boxes of Figures 5-9 should be labeled with the appropriate text. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the letter "e" is missing from several words through the specification. For example, "on" should read —one—(page 3, line 2); "electrod s" should read —electrodes—(page 4, line 2); "th" should read —the—(page 4, line 3).

Appropriate correction is required.

Claim Objections

3. Claims 3, 9, and 13 are objected to because of the following informalities: "lectric" should read —electric—in claim 3 (line 1); "Th" should read —The—in claim 9 (line 1); and "th" should read —the—in claim 13 (line 7). Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,243,975 ("Alferness"). Alferness discloses a defibrillator (20) for applying electric stimulation to a living body, comprising a plurality of electrodes (electrode paddles 28) adapted to be attached on the living body and through which an

electric pulse is output as the electric stimulation (col. 3, lines 56-58). Alferness discloses an analyzer which detects a waveform of the electric pulse (patient impedance measurement circuit 70 detects waveform from waveshaping and switching circuits 26) and analyzes a parameter (i.e., the transthoracic resistance, energy delivered by transmitted defibrillation pulse) of the waveform. These parameters are displayed on a display (90) (col. 4, lines 48-55).

With respect to claim 14, Alferness discloses an energy charging element (capacitor 22) having terminals, in which an electric energy to be supplied to the electrodes is charged (see Fig. 1). Waveshaping and switching circuits include a high voltage relay which shape the charge released from capacitor 22 (col. 3, lines 45-55) and the analyzer (patient impedance measurement circuit 70) detects the voltage waveform between the terminals as a waveform of the electric pulse to be output (see Fig. 1).

6. Claims 1-2, 4-5, 7, 9-10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,243,975 ("Alferness"). Alferness discloses a defibrillator (20) for applying electric stimulation to a living body, comprising a plurality of electrodes (electrode paddles 28) adapted to be attached on the living body and through which an electric pulse is output as the electric stimulation (col. 3, lines 56-58). Alferness discloses an analyzer which detects a waveform of the electric pulse (patient impedance measurement circuit 70 detects waveform from waveshaping and switching circuits 26) and analyzes a parameter (i.e., the transthoracic resistance, energy delivered by transmitted defibrillation pulse) of the waveform. These parameters are

Art Unit: 3762

displayed on a display (90) (col. 4, lines 48-55). Alferness does not specifically disclose that display (90) performs the function of displaying the parameter together with the detected waveform of the electric pulse. The recitation that the display performs such a function is not a positive limitation, but only requires the ability to so perform. *In re Hutchinson*, 69 USPQ 138. The display (90) disclosed in Alferness displays information regarding (1) the heart beat of the patient undergoing defibrillation (shown as 102 in Fig. 2) and (2) the energy and current of the transmitted defibrillation pulse and the transthoracic impedance of the patient (col. 4, lines 48-55). Thus, display (90) is necessarily capable of displaying the detected waveform of the electric pulse, as evidenced by the fact that display (90) is capable of displaying the patient's heart beat waveform.

With respect to claim 2, Alferness discloses an energy charging element (capacitor 22) having terminals, in which an electric energy to be supplied to the electrodes is charged (see Fig. 1). Waveshaping and switching circuits include a high voltage relay which shape the charge released from capacitor 22 (col. 3, lines 45-55) and the analyzer (patient impedance measurement circuit 70) detects the voltage waveform between the terminals as a waveform of the electric pulse to be output (see Fig. 1).

With reference to claims 4 and 9, Alferness discloses displaying parameters including the energy and current output by the electric pulse and a resistance between the electrodes (the transthoracic impedance of the patient) (col. 4, lines 48-55).

Art Unit: 3762

With reference to claim 5 and 10, Alferness discloses a storage (memory included in microprocessor 80, see col. 4, lines 38-41), which stores the transthoracic impedance output provided by impedance measurement circuit 70 (col. 6, lines 20-22).

With reference to claim 7 and 12, Alferness discloses a defibrillator (20).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 4-5, 7, 9-10, and 12 are also rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,243,975 ("Alferness") in view of U.S. Patent No. 4,316,472 ("Mirowski").

As described above, Alferness discloses applicant's basic inventive concept, detecting and displaying parameters associated with a defibrillation pulse. Alferness does not specifically disclose that display (90) performs the function of displaying the parameter together with the detected waveform of the electric pulse. Mirowski teaches that it is known to display a signal representative of the delivered electrical shock on the defibrillator display (see Fig. 2 in which such a signal 46 is displayed along with a signal representing the patient's heart beat 44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the display (90) of Alferness to include a display of the waveform of the delivered electrical shock in order

Art Unit: 3762

to provide the operator with a visual representation of the delivered electrical pulse to easily illustrate the timing and effects of the delivered electrical pulse on patient's heart signal.

9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,243,975 ("Alferness") in view of U.S. Patent No. 4,316,472 ("Mirowski") as applied to claims 1 and 2 above, and further in view of U.S. Patent No. 5,713,937 ("Nappholz").

Alferness and Mirowski fail to disclose the use of index marks on the display which corresponding to the detected parameters. Nappholz teaches the use of indicia which reveal, quantify, and explain various parameters (see Fig. 5). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the display (90) of Alferness to include such indicia in order to visually correlate the displayed parameters with the displayed waveforms.

10. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,243,975 ("Alferness") in view of U.S. Patent No. 4,316,472 ("Mirowski") as applied to claims 1 and 2 above, and further in view of U.S. Patent No. 5,249,573 ("Fincke").

Alferness and Mirowski fail to disclose a plurality of housings which house the defibrillation paddles/electrodes and a resistor connected between the housings such that terminals of the defibrillation paddles/electrodes are exposed at the housings, wherein the defibrillation paddles/electrodes are electrically connected via the resistor when located in the housings. Fincke discloses a defibrillation discharge test mode, in

Art Unit: 3762

which the defibrillation paddles are stored in a well 162 such that electrodes 160 contact a shorting bar 166. A defibrillation pulse is discharged across a short circuit, rather than the thoracic resistance of a patient, to test the defibrillation discharge circuit's functionality (see Fig. 8 and associated text). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the defibrillator of Alferness to include such a defibrillation discharge test mode in order to frequently test the defibrillation discharge circuit's functionality due to the critical nature of the emergency situations in which a defibrillator is needed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent Nos. 3,886,950; 4,328,808; 5,088,489; and 5,397,336 disclose displaying parameters corresponding to a detected defibrillation pulse on a display. Also, U.S. Patent No. 5,725,560 discloses displays of model invariable waveforms representative of the electrical pulse sent to the patient.

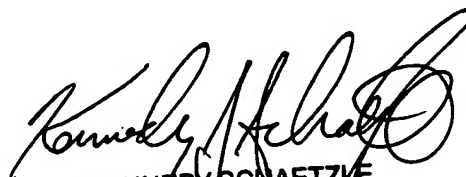
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole R. Kramer whose telephone number is 571-272-8792. The examiner can normally be reached on Monday through Friday, 8 a.m. to 4:30 p.m..

Art Unit: 3762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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KENNEDY SCHAETZLE
PRIMARY EXAMINER
6/10/05